No. 394 ROTATING BEACON

Electrical connections to this accessory are made by inserting bare ends of connecting wires into the clips on the bottom of the beacon. After electrical connections are made and power is on, lower the rotating lens housing carefully over the beacon lamp so that the pivot rests in the small cup on top of the lamp.

After a minute or two the lamp will heat the air inside the housing. This air streaming through the vanes on top of the housing will cause it to turn slowly. If you wish you can start it off by spinning it gently in clockwise direction. If rotation of housing stops, move the pivot slightly to a different spot in the lamp cup.

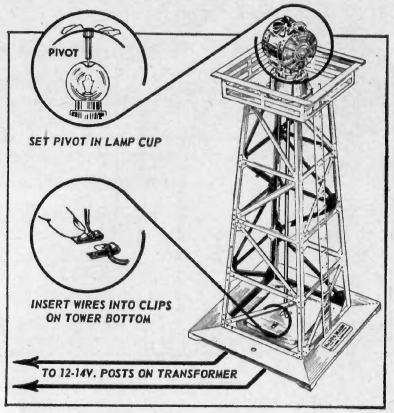

Figure 58—No. 394 Rotating Beacon

NOTE: To make sure that the beacon operates at normal speed keep it out of drafts. The housing is so light that a slight air current will interfere with the motion.

No. 455 OIL DERRICK

No. 455 Oil Derrick operates best on fixed voltage ranging from 10 to 15 volts. After the connections are made to two binding posts located on the bottom of the derrick, its "walking beam" pump will operate with a slow rocking motion. The timing of the pump stroke can be regulated by means of an adjusting screw.

The lamp which illuminates and warms the bubbling oil column is mounted in a hinged bracket on the base of the derrick. In Figure 59 it is shown in open position, ready for removal. In operating position it is snapped shut.

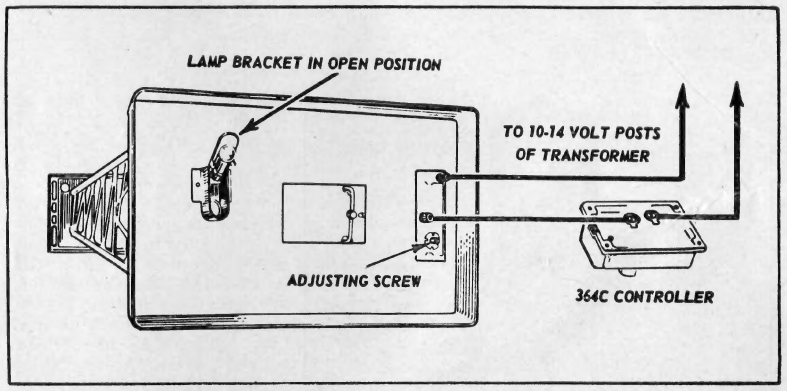

Figure 59—Bottom View of Pumping Oil Derrick

VOLTAGES REQUIRED BY ACCESSORIES

Because the actual voltages may vary somewhat from the voltages indicated on binding posts, it is not practical to give a hard and fast rule for connecting accessories to a particular pair of transformer terminals. The actual working voltages required by Lionel accessories are given in the chart below. The best practice is to connect the accessory to a pair of transformer posts which have a slightly higher indicated voltage than that required by the accessory. If the accessory does not operate with enough snap shift to the next higher available voltage.

In wiring unusually large layouts many model railroaders use a separate transformer to supply power for their lights and illuminated accessories. In this way, a variation in the load of the main transformer does not affect the voltage supplied to the accessories.

Illuminated Non-Operating Accessories		
58 Lamp Post 70 Floodlight 71 Lamp Post 256 Freight Shed 394 Beacon 395 Floodlight	12-14 volts	Use fixed voltage slightly lower than that specified, to prolong lamp life. These accessories can be connected in parallel as shown in Figure 47.
Automatic Signals		
145 Gateman 151 Semaphore 153 Stop Signal 252 Crossing Gate	10-14 volts	These accessories receive fixed voltage through No. 145C or No. 153C Contactors. See pages 20, 21 and 22.
154 Highway Signal 1045 Flagman	9-14 volts	These operate on track voltage received through special contactors.
Track Accessories		
26 Bumper 213 Lift Bridge 1121 Switches LTC Lockon	9-14 volts	Track voltage. No wiring required.
*022 Switches	10-14 volts	Track voltage (no wiring) or Fixed voltage. (See chart on page 17)
*6019 or UCS Track	9-14 volts	Track voltage (no wiring) or Fixed voltage.
*456 Coal Ramp	9-14 volts	Track voltage (Through Lockon) or Fixed voltage.
* Since these accessories are a part of the track system, the fixed voltage circuit used must have the same "ground" as the track circuit, or a "short" will result. When making connections to transformer be sure to follow chart on page 17.		
Operating Accessories		
97 Coal Elevator 164 Lumber Loader 364 Lumber Loader 397 Coal Loader 455 Oil Derrick	10-14 volts	These accessories operate on fixed voltage. They can be connected to any pair of transformer posts having a nominal voltage from 12 to 16 volts.
30 Water Tower 125 Whistle Station	9-14 volts	Track voltage through Lockon.